Stanford

Param Priya Singh

Casual - Non-Exempt, Genetics

Bio

HONORS AND AWARDS

- Postdoctoral fellowship, Stanford Center for Computational, Evolutionary and Human Genomics (2015-2016)
- PhD Fellowship, La Ligue contre le cancer (2014)
- PhD fellowship, Erasmus Mundus (2010-2013)

EDUCATION AND CERTIFICATIONS

- PhD, Institute Curie, University Pierre et Marie Curie , Evolutionary Genomics (2013)
- MS, University of Pune , Bioinformatics (2008)

LINKS

- Brunet Lab Home Page: http://web.stanford.edu/group/brunet/
- Turquoise Killifish Genome Browser: http://africanturquoisekillifishbrowser.org/
- Vertebrate Ohnologs: http://ohnologs.curie.fr/

Publications

PUBLICATIONS

- **Vertebrate diapause preserves organisms long term through Polycomb complex members.** *Science (New York, N.Y.)*
  Hu, C., Wang, W., Brind'Amour, J., Singh, P. P., Reeves, G. A., Lorincz, M. C., Alvarado, A. S., Brunet, A.
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- **OHNOLOGS v2: a comprehensive resource for the genes retained from whole genome duplication in vertebrates** *NUCLEIC ACIDS RESEARCH*
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  2020; 48 (D1): D724–D730
- **Mutations in calmodulin-binding domains of TRPV4/6 channels confer invasive properties to colon adenocarcinoma cells** *CHANNELS*
  Arbabian, A., Iftinca, M., Altier, C., Singh, P., Isambert, H., Coscoy, S.
  2020; 14 (1): 101–9
- **The Genetics of Aging: A Vertebrate Perspective.** *Cell*
  Singh, P. P., Demmitt, B. A., Nath, R. D., Brunet, A.
  2019; 177 (1): 200–220
- **Remodeling of epigenome and transcriptome landscapes with aging in mice reveals widespread induction of inflammatory responses.** *Genome research*
  Benayoun, B. A., Pollina, E. A., Singh, P. P., Mahmoudi, S., Harel, I., Casey, K. M., Dulken, B. W., Kundaje, A., Brunet, A.
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- **The genome of Austrofundulus limnaeus offers insights into extreme vertebrate stress tolerance and embryonic development** *BMC GENOMICS*
  Wagner, J. T., Singh, P., Romney, A. L., Riggs, C. L., Minx, P., Woll, S. C., Roush, J., Warren, W. C., Brunet, A., Podrabsky, J. E.
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- **Progranulin, lysosomal regulation and neurodegenerative disease** *NATURE REVIEWS NEUROSCIENCE*
  Kao, A. W., McKay, A., Singh, P. P., Brunet, A., Huang, E. J.
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- **Learning causal networks with latent variables from multivariate information in genomic data.** *PLoS computational biology*
  Verny, L. n., Sella, N. n., Affeldt, S. n., Singh, P. P., Isambert, H. n.
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- **The African Turquoise Killifish Genome Provides Insights into Evolution and Genetic Architecture of Lifespan** *CELL*
  Valenzano, D. R., Benayoun, B. A., Singh, P. P., Zhang, E., Etter, P. D., Hu, C., Clement-Ziza, M., Willemsen, D., Cui, R., Harel, I., Machado, B. E., Yee, M., Sharp, et al
  2015; 163 (6): 1539-1554

- **Identification of Ohnolog Genes Originating from Whole Genome Duplication in Early Vertebrates, Based on Synteny Comparison across Multiple Genomes** *PLOS COMPUTATIONAL BIOLOGY*
  Singh, P. P., Arora, J., Isambert, H.
  2015; 11 (7)

- **A platform for rapid exploration of aging and diseases in a naturally short-lived vertebrate.** *Cell*
  Harel, I., Benayoun, B. A., Machado, B., Singh, P. P., Hu, C., Pech, M. F., Valenzano, D. R., Zhang, E., Sharp, S. C., Artandi, S. E., Brunet, A.
  2015; 160 (5): 1013-1026

- **Human Dominant Disease Genes Are Enriched in Paralogs Originating from Whole Genome Duplication** *PLOS COMPUTATIONAL BIOLOGY*
  Singh, P. P., Affeldt, S., Malaguti, G., Isambert, H.
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- **On the retention of gene duplicates prone to dominant deleterious mutations** *THEORETICAL POPULATION BIOLOGY*
  Malaguti, G., Singh, P. P., Isambert, H.
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- **Evolution and cancer: expansion of dangerous gene repertoire by whole genome duplications** *M S-MEDECINE SCIENCES*
  Affeldt, S., Singh, P. P., Cascone, I., Selimoglu, R., Camonis, J., Isambert, H.
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- **On the Expansion of "Dangerous'' Gene Repertoires by Whole-Genome Duplications in Early Vertebrates** *CELL REPORTS*
  Singh, P. P., Affeldt, S., Cascone, I., Selimoglu, R., Camonis, J., Isambert, H.
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- **Case for an RNA-prion world: a hypothesis based on conformational diversity** *JOURNAL OF BIOLOGICAL PHYSICS*
  Singh, P. P., Banerji, A.
  2011; 37 (2): 185-188